VOLUME 1, NUMBER 3, MAY 1972

Family Planning Digest

A Publication of the National Center for Family Planning Services, Health Services and Mental Health Administration, U.S. Department of Health, Education and Welfare.

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Contraceptive Practice

More Research Needed In Rhythm Methods

Exploration of various aspects of the rhythm method of family planning—especially ways to predict ovulation—is being carried out vigorously by investigators here and abroad, it was indicated at a three-day conference on the subject, sponsored by the Human Life Foundation and the Center for Population Research of the National Institute of Child Health and Human Development.

Speakers at the conference emphasized the need for more intensive research into both the rhythm method and the human menstrual cycle. They also said that additional research is required into the possible relationship of the fertilization of aging ova to congenital abnormalities, and into the psychological aspects of natural family planning.

In the quest for a predictor of ovulation, Dr. and Mrs. John J. Billings of St. Vincent's Hospital, Melbourne, Australia, reported they had trained "several hundred" women to detect a pattern of cervical mucus secretions as a method of determining fertile or infertile days in the cycle. The quality of the mucus is determined by feeling the vaginal lining just inside the introitus. Under the "ovulation method," as the Billingses call it, the women maintain a record of mucus secretions, beginning several days after menstruation. There is a peak at which the quality of the mucus—clear and slippery—indicates ovulation is occurring. "Infertile cycles and probably infertile days may be marked by a dry, flaky mucus, obviously different from the clear, slippery stretchy mucus of days of high fertility," the Australian couple noted, adding that they considered the mucus method superior to the temperature-taking technique.

Dr. and Mrs. Billings and Drs. J. B. Brown and H. G. Burger recently described in *Lancet* a study of 22 women using the mucus method to predict ovulation. The investigators measured plasma luteinizing hormone and urinary estrogen and pregnanediol to get a "hormonal estimate" of the day of ovulation. The women were asked to keep daily records of mucus symptoms and to measure vaginal basal body temperature before rising in the morning. The researchers concluded that the women could be taught to recognize a pattern of mucus secretion during the cycle so that they could detect "the occurrence of a particular symptom—namely lubricative clear mucus." In an editorial discussing the work of the Australians, *Lancet* commented that "much remains to be done before these valuable observations can be translated into a practical program for conception control." Field trials must be conducted, among other research, to "determine the acceptability and reliability, and continuation rates," the journal observed.

Other efforts to discover an accurate predictor of impending ovulation were described by Dr. John Marshall, Professor and Chief of the Department of Obstetrics and Gynecology of the University of California at Los Angeles. He found blood tests impractical, while urine tests, although easier to take, also present problems: Measuring pregnanediol, for example, requires a timed, 12-hour urine collection, and the test becomes positive only after the end of the fertile period. Dr. Marshall noted that a test for urinary xanthurenic acid, which increases about the time of ovulation, is being evaluated.

None of the past saliva tests has won acceptance, Dr. Marshall continued. "A new reported technique for measuring alkaline phosphatase in saliva using a paper strip indicator may offer some promise," he said. Dr. Marshall, discussing the Billingses' method of mucus recording, said that "it appears to have great promise as a practical technique for natural family planning."

A closely related subject, ovulation control, was also on the agenda. Considerable research, it was agreed, is necessary before ovulation control can be achieved. In this connection, Drs. John Boutselis, Nichols Vorys and Richard Dickey of the Ohio State University College of Medicine recently reported that a preliminary study of 130

women, taking low-dose estrogen from day nine to day 14 of the cycle, showed regulation of ovulation within three days in 96.4 percent of the patients.

The possible relationship of fertilization of aging ova and of aging sperm to birth abnormalities was discussed by several investigators. (An aging ovum is one in which fertilization occurs later than normal, after there may have been alterations in its developmental process.) Dr. Richard Blandau, Professor of Biological Structure at the University of Washington School of Medicine, said that the aging ovum, as shown in electron microscopy, lacks the protection of the layer of granules under the cell membrane, which normally block entry of more than one spermatozoon into a fertilized ovum, and that, as a resu't, polyspermy may take place. Such fertilization is connected with a higher proportion of abnormal births. Dr. Marie-Clair Orgebin-Crist of Vanderbilt University Hospital, Nashville, noted that both aged and immature spermatozoa, in animal studies, had been shown to lead to "a greater number of abnormalities in the fertilized ovum."

Rhythm and Congenital Defects

A call for large-scale investigations of pregnancies in order to study the probability of conception or abortion after coitus on any specific day of the cycle, was made by Dr. Rodrigo Guerrero of Valle University in Cali, Colombia. "The rationale for attributing some hazards to the rhythm method lies in the fact that sexual activity in the human is not restricted to the time of estrus (as in the horse, for example, or coitus does not induce ovulation, as in the rabbit)," Dr. Guerrero said. He added that it had been suggested that use of the rhythm method "may be associated with some congenital malformation, especially trisomy or Down's syndrome (Mongolism), through fertilization of overripe ova." (An overripe ovum is one which has been retained in the follicle beyond the normal time, with structural changes occurring before the rupture of the follicle. It is also sometimes defined as an ovum which is fertilized after it has traveled some distance along the tube.) However, he warned that most of the research on the relationship with congenital abnormalities had been based on animals, and not "even on primates." Thus, he felt that researchers must be careful not to connect this to humans until proof is obtained.

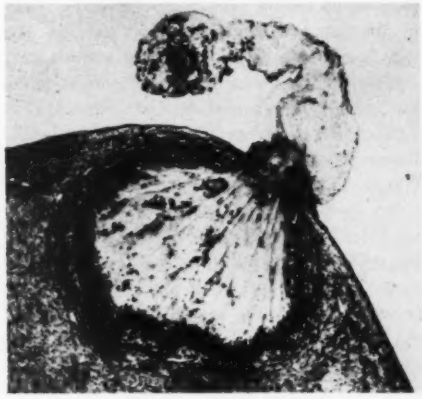
Various epidemiologic studies cite a high incidence of chromosomal congenital defects in Ireland and among Boston Irish Catholics. These and other studies, showing a high incidence of such malformations as spina bifida and hydrocephalus in Catholics, suggest that fertilization of overripe ova "presumably could be increased among those using the rhythm method," according to Dr. Celso Ramon Garcia. The late Emil Witschi of the Bio-Medical Division of the Population Council, Rockefeller University, noted that studies indicated that sporadic malformations in animals were due largely to overripeness of the egg at the time of insemination.

In describing the reproductive rhythm of animals, Dr. Andrew Nalbandov of the University of Illinois pointed out that the estrus cycle "is one of the cleverest evolutionary devices in nonprimates, for it insures that fresh and healthy gametes will be available for conception." He added that such "exact timing" may not take place in primates, particularly humans.

Dr. Raymond L. Vande Wiele of Columbia University offered 34 equations which form a mathematical model simulating the changes in the primate menstrual cycle. Using a computer, the introduction of normal random variations produces occasional anovulation, late ovulation, and other states formerly considered to be pathological. In addition, a series of rapid oscillations replaces the supposed steady rise or fall in hormone levels. These oscillations in luteinizing hormone (LH) and estrogen levels stay in phase during part one of the cycle, but step out of phase in part two of the cycle. It would appear, thus, that a precise report of ovarian activity is being sent constantly to the hypothalamus, and thus could support a new basis for inducing or blocking ovulation.

A study of the menstrual histories of University of Minnesota graduates, their daughters and some granddaughters, carried on for many years by Dr. Alan Treloar, Head of the Reproduction Anthropometry Section of the National Institute of Child Health and Human Development, casts doubt on the idea of a "regular cycle." The study indicates the marked instability of the cycle in the first few years after menarche and after 40, and suggests that even during the period of relative stability, from the ages of 20 to 40, there are enough variations to label the 28-day cycle a myth. Each woman appears to possess a definite individuality; for example, five percent reveal periods below 24 days, while another five percent show periods over 37 days.

Turning to psychological aspects of family planning, Dr. Judith M. Bardwick of the University of Michigan observed that the mental health of a couple has sometimes been overlooked. She drew up a balance sheet for natural family planning. On the positive side, the method costs nothing, is available, reversible and physiologic. On the debit side, she pointed out, the rhythm method is not spontaneous and anxiety accompanies its use. "Conception is imbedded in emotion," Dr. Bardwick said. ". . . It certainly seems likely . . . that emotional barriers to effective contraception have been under-estimated. . . ." Dr. Bardwick said that the rhythm method is not psychologically easy "because you are asking women to pay attention to functions which are more happily ignored."



Rabbit ovary follicle at ovulation. Egg is shown being discharged at moment of rupture.

Other speakers disagreed with Dr. Bardwick's interpretation, saying that they had found a lessening of anxiety when women had learned more about the reproductive process and its control.

Dr. Conrad W. Baars of Rochester, Minnesota, who was moderator of the session on psychological aspects of natural family planning, also emphasized the need for concern about the mental health of the couple. He suggested that although the quest for happiness is accepted as a goal, family planning should be viewed as an aid to such a quest. Such activity, he declared, is conducive to mental health and development of growth and maturity.

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Family Planning Digest

Volume 1, Number 3, May 1972

A Publication of the National Center for Family Planning Services, Health Services and Mental Health Administration, U.S. Department of Health, Education and Welfare. Prepared bimonthly by the Center for Family Planning Program Development, the Technical Assistance Division of Planned Parenthood-World Population.

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The Project upon which this publication is based was performed pursuant to Contract No. HSM 110-71-176 with the Health Services and Mental Health Administration, Department of Health, Education and Welfare.

The views expressed herein do not necessarily reflect the views of the National Center for Family Planning Services, Health Services and Mental Health Administration, DHEW.

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R. Guerrero, M.D., "Possible Effects Associated with Use of the Periodic Abstinence Method of Family Planning."

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Economic Effects

Couples Best Off Who Best Plan Number and Spacing of Children

Couples' ability to plan the number and spacing of their children is closely correlated with their chances of economic improvement, as well as with their satisfaction—or dissatisfaction—with their economic position, Lolagene C. Coombs and Ronald Freedman conclude, in their report on a five-year study of married women in the Detroit area. Worst off economically—and most unhappy about it—were couples whose first child was premaritally conceived. These couples continued to have birth planning failures in the course of their marriages, and the economic gap between them and couples who were more successful planners widened with time. Best off economically were those couples who delayed the birth of their first child until a year or more after marriage, described by the authors as "long-spacers." "Short-spacers," those couples who were not premaritally pregnant but who had their first child within the first year of marriage, began childbearing at an economic disadvantage as compared to the long-spacers, but tended to catch up over time. These couples, by and large, did not have birth planning failures, but wanted, expected and had more children than the long-spacers.

The researchers based their findings on a sample of 1,113 white married women selected early in 1962 to constitute a probability sample of all such women in the Detroit Metropolitan Area who had a first, second or fourth birth in July 1961. These women were reinterviewed in the fall of 1962, 1963 and 1966 to determine their familial growth and economic progress. Dropout from the study, chiefly because of divorce, separation or death of either spouse, was low, so that Drs. Coombs and Freedman could base a full five-year analysis of this group on 947 women, or 85 percent of the original sample.

At the time of the first interview, couples who were premaritally pregnant were poorest, as measured by their income as well as by their assets. Couples who had their first child a year or more after marriage were best off. Those who had their first child from nine to 12 months after marriage fell in between, but ended up closer to those who delayed childbearing than to the premaritally pregnant.

These three groups were found to differ markedly from each other "in ways which could have a considerable bearing on economic differences":

- The long-spacers, who delayed having children for a year or more, most closely approximate the "rationalist model of couples who carefully plan to have few children," the authors found. They married later than the premaritally pregnant, but at about the same age as the short-spacers who had babies in the first year of marriage. They included relatively few Catholic couples, and had, wanted and expected the fewest children; they began contraception early in married life and had especially long intervals between births. All this gave them "a time at the beginning of marriage for the husband to increase his earning power, for the wife to work, for accumulating assets, and for various adjustments, personal and financial, in the early phase of family planning," the authors state.
- The marriage age and educational level were found to marry and begin their families when very young; husbands were especially young when their children were born and, of the husbands in the three groups, had the least education (mainly because they married so early). Both the first and successive births occurred relatively soon after marriage, but the authors find "no evidence . . . that this reproductive pattern . . . is their own choice." On the contrary, they find that premaritally pregnant couples "include the largest proportions who expect more children than they want [or who] already had more children than they wanted." This was true despite the fact that most used contraception early, almost all were using contraception by the time of the last interview, and large numbers stated they used the pill. On this point, Dr. Freedman explained to *Digest* that, as a group, the premaritally pregnant were not good planners, did not act rationally to meet their goals and were evidently not using the pill with the consistency and self-discipline necessary for contraceptive efficiency.
- The marriage age and educational level of the short-spacing (but not premaritally pregnant) couples were found to be similar to the long-spacers. "However, they build their families in quite a different way, one that suggests a desire to have more children and have them quickly. . . . They expected *and wanted* more children than either the premaritally pregnant or the long-spacers both in 1962 and 1966," and carried through their intentions by "having more pregnancies per woman than either of the other groups" between the first and last interviews. While they used contraception, they began relatively late and were more likely to use rhythm than were the other couples in the study. The short-spacers included the largest proportion of Catholics, but also many of other faiths. While some were inconsistent in preferences, expectations and performance, for the great majority "more rapid family building appears a matter of volition."

Drs. Coombs and Freedman have paid especial attention to this last group because its experience helps answer two vital questions: First, "What is the economic position of couples who do not start with any disadvantage in education or age at marriage, but who want more children and have them more quickly than other couples not premaritally pregnant?" and, second, "How do

Birth planners better off, happier

they compare with other couples who similarly build their families quickly but are at the disadvantage of marrying early, having poorer education and having a premaritally conceived child born very shortly after marriage?"

From a detailed multifactor analysis the authors concluded that "the nature of the first birth interval has a persistent, if diminishing, connection to family economic status, as we observe later stages of family life." The greatest distinction is between those who become pregnant before marriage and those who delay the first birth, with progressively lesser differences over time between those who choose to delay family building and those who decide to start having children right away.

Broken down by group, their conclusions are as follows:

- For the premaritally pregnant "the passage of time means a decrease in their income disadvantage but much less relative gain in assets." Even in proportion to their income their assets are low. Only a small part of this disadvantage is attributable to shorter marriage duration, younger age at marriage or younger current age. Much more is attributable to poor education, but since such a defect is rarely made up later in life "it is unlikely that most of the premaritally pregnant will 'catch up' even with more time." Premaritally pregnant couples did not want more children or put less emphasis on economic goals than the other groups, but were, in fact, "more dissatisfied with the number and timing of their children . . . [and] with their economic situation than the other groups." The minority of premaritally pregnant couples who began contraception after their first child, and had no more than one or two children, or delayed their second or third child, had higher incomes (though not more assets) than premaritally pregnant couples who had several children in rapid succession. It should be added here, however, that numbers of children alone had no effect on overall family prosperity for most families studied. As Drs. Cooombs and Freedman put it: "A simplistic view that couples with fewer children are much better off economically certainly is not borne out by any of these data."
- Short-spacers tended to improve their economic position rapidly with time, and their initial disadvantage vis-a-vis the long-spacers seemed closely linked to shorter marriage duration and consequent younger age of husbands when the children were born. Since they were married at similar ages to the long-spacers, had simi'ar education and even, the study showed, a higher occupational status, it is not surprising that assets and income matched when allowance was made for age or duration of marriage. Having children earlier did, however, give the short-spacers a lower living standard when the children were born, and their choice for larger families may have given them lower income and assets per family member. Unlike the premaritally pregnant, this did not seem to upset the typical short-spacers, since they "apparently take this different family-building path rather deliberately, and they do not express any greater dissatisfaction with their income position than do the long-spacers."
- Long-spacers had the highest level of income and assets at the start of the study in 1962 and maintained this position despite short-spacer advancement through the end of the study in 1966. This superiority came about largely because they had been married longer and were older, so that the husband was more advanced in his career at the birth of each child. Furthermore, "since these couples on the average [now] have fewer children than others, their income or assets per family member or per child were substantially greater in 1966 than either of the other groups." Lastly, their success in matching expectations, desires and performance over several years suggests that they will end up with the fewest number of children, since the short-spacers desire more children and the premaritally pregnant seem unable to control their fertility.

Source

L. C. Coombs and R. Freedman, "Pre-marital Pregnancy, Childspacing, and Later Economic Achievement," *Population Studies*, 24:389, 1970.

Sterilization

Simpler Methods Boost Public Acceptance

The growing popularity of voluntary contraceptive sterilization in the United States, combined with simpler surgical procedures, growing governmental and professional acceptance, and increased prospects for reversibility, may make it an important factor in family planning in the next few years.

- Thanks to advances in laparoscopy and culdoscopy—new ways of working inside the human body without major surgery—female sterilization is being performed increasingly as an outpatient procedure.
- Connecticut, one of the two remaining states banning sterilization save for "medical necessity," repealed its law effective October 1, 1971.
- In 1969 the American College of Obstetricians and Gynecologists (ACOG) dropped all of its long-standing age and parity restrictions on sterilization, and hospitals and physicians have begun to follow the College's lead.
- The Office of Economic Opportunity (OEO), after seven years in the family planning field, revoked its rule against supporting voluntary sterilization programs for poor patients.

- Reluctance among men to take such a conclusive step in terminating their procreative ability may fade if experimental work on sperm banks and reversible devices proves successful.

In many parts of the United States the demand for contraceptive sterilization would seem to exceed the supply of facilities and favorably disposed physicians, suggesting that the percentage of Americans choosing sterilization will increase even more rapidly as services are created for them. In Houston, for example, Dr. Abel J. Leader, Clinical Professor of Urology at Baylor College of Medicine, reports that one single news item announcing a new vasectomy service produced enough telephone inquiries to disrupt all regular work at the local Planned Parenthood office. Similarly, the first voluntary sterilization project funded by OEO, begun earlier this year in rural Tennessee, got its initial impetus from pleas by poor family planning clients for something simpler and more permanent than the pill or IUD. This latter program, supported by a two-year OEO grant of $240,773 to the Planned Parenthood Association of the Southern Mountains, is offering sterilization to 150 men and 150 women, while simultaneously evaluating its psychological effect on them.

New Female Procedures

Strictly medical problems in male or female sterilization seem largely to have been solved over the past few years, except for guaranteeing reversibility. In female sterilization, for example, the new visualization devices that have revolutionized much of internal diagnosis and surgery are making it possible for women to have their tubes cut on an outpatient basis without the major abdominal

surgery and long hospital stays formerly needed. This dramatic improvement stems from the discovery that some plastic fibers will transmit a beam of light along their entire length even when bent or tied in knots. A bundle of such fibers can therefore be used to carry light from an outside source through a thin steel tube to many points inside the human body. A parallel fiber bundle, terminating in a lens, can carry an image of such a lighted body cavity back to the surgeon's eye, permitting him both to diagnose hitherto hidden disorders and to perform some types of surgery. Thus, instead of opening up the abdomen with a major incision, the gynecologist now needs to make only two small incisions, one for the fiber optic tube, or 'scope', the other for his instruments.

The two applications of this technique to female sterilization are called laparoscopy and culdoscopy, the first involving penetration through the abdominal wall, the second through the vagina. Each approach has its vigorous adherents, and each has been used successfully, as both an outpatient procedure and one requiring only an overnight hospital stay.

In laparoscopic tubal sterilization, as described by Dr. Patrick C. Steptoe, Senior Consultant Obstetrician and Gynecologist, Oldham and District Hospital Group, Lancashire, England, the patient is first put under general anesthesia and her abdomen inflated with a harmless gas to spread out the organs and make visualization easier. Then the physician inserts a laparoscope and checks to see that there are no pathological conditions present which would make the operation unsafe. Next, he inserts forceps specially designed to carry an electric current. Under laparoscopic illumination and observation he uses the forceps to lift up one tube, coagulate it, and then sever it with the cutting edge of the forceps. After repeating the procedure on the other side of the uterus he checks to assure that the electric heat has prevented any bleeding, removes his instruments and evacuates the gas. When the patient comes out of the anesthesia, Dr. Steptoe says, she can be sent home. No internal sutures are needed, and the outside punctures can be closed with temporary clips. He finds that the patients are "fully recovered by the third day," and can recommence coitus within one week of the operation. Out of 1,350 laparoscopic sterilizations performed at Oldham, Dr. Steptoe reports no mortality and few complications, most of which occurred when the new technique was first being used.

Although laparoscopy is normally performed under general anesthesia, Dr. Clifford R. Wheeless of Johns Hopkins reports equal success with local anesthesia. While he prefers general anesthesia, Wheeless points out that the shortage of competent anesthesiologists might make local anesthesia preferable in some communities. Dr. Wheeless also reports that by using a combined forceps and laparoscope inserted through the puncture used to pump in the gas, he now needs to make only one opening on the patient's abdomen for the entire procedure.

Culdoscopy is a similar procedure performed through the vagina under local anesthesia. A strong case for this approach was made recently by Dr. Alfonso J. Gutierrez Najar, Professor of Obstetrics and Gynecology at the University of Mexico, in a report to the 1971 meeting of the American Association of Planned Parenthood Physicians. He starts by giving his patients a general analgesic that reduces body pain but does not induce unconsciousness. After anesthetizing the deepest part of the vagina beyond the uterine cervix he makes a small puncture and inserts a metal tube through which a natural inflow of air expands the abdominal cavity. He then inserts a fiber optic culdoscope and inspects the abdominal cavity for any pathological problems. Such problems are rare, he adds, among his patients. Next he takes out the culdoscope and metal tube, enlarges the puncture and puts the culdoscope back in together with a long uterine clamp. Under culdoscopic observation he grasps a fallopian tube and pulls it gently into the vagina where it can be cut or closed by any of several techniques. Most recently, he has had especial success in closing the tubes with permanent metal clips of a type used for years in nerve and blood vessel surgery. Upon completing work on one tube he replaces it and brings out the other for similar treatment. After running a test to confirm full tubal closure he takes out all instruments, replaces the metal sheath and presses on the abdomen to expel the excess air within. Then the metal tube comes out, the vaginal incision is stitched up and the patient sent home as the analgesic wears off.

Chemical Sterilization

Experimental work now in progress has shown that transcervical injections of irritating chemicals will cause a tissue reaction that may block the fallopian tubes where they open into the uterus, according to Drs. Sheldon J. Segal and Christopher Tietze of The Population Council. Three monthly injections of atabrine into the uterine cavity, for example, have produced tubal closure in 11 of 12 women tested. "Other investigators," they say, "are using the transcervical approach to achieve closure of the tubes by applying a sclerosing chemical or physical treatment directly to the tubal openings." Since, as Drs. Segal and Tietze point out, the fallopian tubes have shown a great capacity for self-repair, the results of such approaches must be observed over a long period of time before their sterilizing effectiveness can be accurately determined.

Male Procedures

Vasectomy, the standard male sterilization procedure, involves severing the two tubes that carry sperm from the testicles to the ejaculatory duct. During this brief operation the surgeon cuts each tube, or vas, removes a short portion and ties back the remaining ends. Performed under local anesthesia and almost always as an office procedure, vasectomy is even safer than female sterilization and much simpler. According to Dr. Harriet B. Presser, Assistant Professor of Sociomedical Sciences at Columbia University, there are no reports from any country, even less developed ones, of a vasectomy-connected fatality. In the United States, major complications are infrequent and failure is quite rare.

As sterilization becomes more common, and popular resistance decreases, the remaining "critical medical aspect of sterilization, both male and female, is its finality," Dr. Presser points out. Attempts to reverse sterilizations done by procedures currently in use have met with varying degrees of success, depending to some extent on the skill of the restoring physician. On the assumption that male sterilization would become more acceptable if it could be reversed, research is going forward both on sperm-blocking devices that could be turned on and off at the patient's choice and on sperm banks where men could store their sperm for possible postvasectomy use.

At the present time the sperm bank appears to some investigators to be the more promising way to enable men to father children after vasectomy. Dr. Matthew Freund, Professor of Pharmacology and Associate Professor of Obstetrics and Gynecology at New York Medical College, claims, indeed, that "there is presently available a practical and proven technique for 'reversible' vasectomy—the use of a frozen semen bank for the preservation of the potential fertility of vasectomized men." Reporting to the First National Congress on Vasectomy on October 15, 1971, he stated that "more than 400 children have been born as a result of artificial insemination with frozen semen." He claims that sperm kept at a temperature of −196°C in liquid nitrogen has maintained full motility for at least four years in his laboratory. Dr. Freund believes that such methods can preserve human sperm indefinitely, providing vasectomized men with what he calls "fertility insurance." Based on such reports of experimental success, sperm banking is now becoming a commercial operation, with banks open or opening soon in several American cities.

Many other experts, however, have strong reservations about such long-term sperm banking at this time. In a special report made to the Planned Parenthood-World Population National Medical Committee on the

Vials of frozen human semen in storage vat. Long-term freezing effectiveness questioned.

current 'state of the art' in the preservation and use of frozen human semen, Dr. Leader pointed out that "no live births have been reported following insemination with semen stored longer than 16 months." He reported also that when Dr. Emil Steinberger, now head of the program in reproductive biology and reproductive endocrinology at the University of Texas Medical School in Houston, and one of the pioneer investigators in this field, terminated his research sperm bank in Philadelphia this past June, he and his associates found that the majority of specimens stored four years or longer had far lower levels of motility than the average seen after short-term storage.

Citing this work, Dr. Leader stated that both he and Dr. Steinberger questioned the advisability of commercial sperm banking at this time. First of all, Dr. Leader said, "one cannot, in clear conscience, promise a prospective donor that his semen will remain fertile." Second, "one cannot promise that the specimen, if fertile, will not produce abortion or fetal abnormalities." Lastly, he cited technical problems, such as the risk that "specimen vials may explode and result in loss of specimens," and that since "liquid nitrogen, a perishable, cannot be stockpiled, any disruption of its supply . . . could result in loss of the entire bank."

Reservations about the effectiveness of sperm frozen for longer than 16 months were also expressed by the Council on Population of the American Public Health Association. In its "Recommended Program Guide for Voluntary Sterilization," the Council said, "When the decision for sterilization is reached, the individuals involved must be informed that all surgical methods currently available should be considered irreversible, and that the biologic potency and genetic adequacy of human sperm which has been frozen and stored over a protracted period of time and then thawed remains to be established."

Technical advances have been reported in the development of sperm-blocking devices that can be turned on or off at the patient's choice. Such devices, Dr. Freund says, include clips, chemicals, catheters and valves. He is especially impressed with the possibilities of a tiny gold and stainless steel valve, developed at New York Medical College, which has been tested successfully in animals and is now undergoing preliminary tests in a small group of human volunteers. However, as Drs. Segal and Tietze point out, "All of these possibilities share the problem of requiring that the devices be anchored with sufficient pressure to close the lumen of the vas, without causing a pressure necrosis that would result in damage to the organ, thus defeating the purpose of the procedure —easy reversal."

Furthermore, several recent reports indicate that development of autoimmunity to the blocked sperm may often make a vasectomy effectively final even if the vas itself is physically reopened. Dr. Sidney Shulman, also of New York Medical College, cites both his own research and that of many others as indicating that antibodies to sperm play an important role in male infertility and are a common sequel to vasectomy.

Social Pressures

Notwithstanding the possible problems of reversibility, the large unfulfilled demand for male and female sterilization in this country today suggests that the chief obstacle to more voluntary sterilizations here at the present time lies in hostile attitudes on the part of hospitals and private physicians. Until 1969, as Dr. Presser reports, the ACOG approved contraceptive sterilization for women only if they had at least five children by age 25, four children by age 30 or three children by age 35. Few hospitals had less restrictive criteria and many set even higher age-parity standards. In 1969, ACOG dropped these restrictions but some hospitals still retain them. The availability of male sterilization as an office procedure depends on the attitudes of individual physicians rather than hospitals, but here too, both Dr. Presser and Dr. Leader report, most physicians set requirements on age or number of children.

The reverse of this restrictive situation has existed for some time in Puerto Rico, where professional permissiveness has combined with popular acceptance to make sterilization common. In a study of sterilization in Puerto Rico, Dr. Presser reported that, in 1965, 34 percent of mothers there aged 20-49 were sterilized, two-thirds before the age of 30. Since, as she pointed out, "The completed fertility of sterilized mothers . . . is roughly three births per mother fewer than that of non-sterilized mothers," the widespread acceptance of sterilization in Puerto Rico is having a definite effect on that island's overall birth rate. A study made in 1966 by Dr. Lawrence Podell, of the City University of New York, reports somewhat similar figures among Puerto Rican mothers on welfare in New York City, 21 percent of whom had been surgically sterilized. This was in dramatic contrast to figures of only nine percent among blacks and five percent among mainland whites. A comparison of the figures given by Drs. Presser and Podell reveals, however, that while sterilization was quite common among mothers younger than 30 years old in Puerto Rico, it was relatively rare among younger Puerto Rican welfare mothers in New York. The suspicion that this difference might result from professional opposition to sterilization in New York is borne out in a study made in 1969 by Susan C. Scrimshaw and Bernard Pasquariella of Columbia University, who reported that while sterilization was well accepted in New York's Puerto Rican community, most of those who wanted it found that they couldn't get it there and had to go back to Puerto Rico for the operation.

The 1965 National Fertility Study reported that among couples with the wife aged 18-39, eight percent had had contraceptive sterilizations, an increase of 60 percent over 1960. Initial figures released from the 1970 National Fertility Study reveal that "almost 3,000,000 wives under the age of 45, or their husbands, had elected sterilization for contraceptive reasons . . . nearly one in every five couples able to bear children who do not intend to have any more. About half of such operations are elected by women and half by men." Contraceptive sterilizations are not only selected by couples near the end of their childbearing years; the same study shows that, typically, a woman is 32 and the man 35 when electing sterilization. The 1965 figures ranged up to 15 percent for the western region of the country, and recent studies indicate that there, at least, the rate may be much higher. For example, one study of Kaiser Health Plan subscribers in a California suburb, reported in the last issue of *Family Planning Digest*, showed that in 23 percent of couples of childbearing age, either the husband or wife had undergone contraceptive sterilization, and that therapeutic sterilization brought the total up to 31 percent. Female sterilizations, here only one-third of the contraceptive total, had increased sharply when the local hospital dropped its restrictions, the Kaiser Foundation researcher reported, and it might be assumed that a more permissive professional attitude toward male sterilization was also needed for this population to reach such high sterilization levels. As U.S. professional attitudes change, it is possible that we may see sterilization become as important in family planning in the 50 states as it is already in Puerto Rico.

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Infant Health

Do Unwanted Babies Fail to Thrive?

A three-year investigation carried out at St. Vincent's Hospital and Medical Center in New York City, has led Dr. J. Patrick Lavery to conclude, "The product of an unwanted and rejected pregnancy, born only because of moral or social reasons, may be in as great jeopardy as the product of a purely medico-obstetrical high-risk pregnancy." Observing that there is already a considerable body of evidence that the unwed pregnant adolescent is at high risk obstetrically, psychologically and socially, Dr. Lavery concentrated upon what he calls "the second member" of the gestation to determine whether the infant, too, is at jeopardy.

He selected 200 girls at random from among 6,043 who delivered at St. Vincent's between April 1967 and March 1969 and April 1969 and September 1970, matching them for age. In one group were 100 girls who received prenatal care and spent their final weeks of pregnancy in residence at the Catholic-sponsored New York Foundling Hospital. The typical girl in this group, according to the physician, came from the low-middle- to middle-income socioeconomic bracket and 93 percent were primigravidae. Ninety-five percent were white. The second group of 100 girls, drawn from the ward service of St. Vincent's, were poorer, the majority receiving some form of municipal assistance. Eighty-four percent were white and the same percentage were primigravidae. The girls in the Foundling Hospital group had the advantage of living in a sheltered environment for at least part of their pregnancy where they received, in addition to psychological support, proper diet and continuous medical care. The Foundling Hospital girls received slightly more prenatal care, making 7.3 prenatal visits compared to 6.5 for the St. Vincent's group.

While these (and perhaps other) advantages appeared to affect the stillbirth and neonatal death rate—12.8 per 1,000 births among the Foundling Hospital mothers compared to 42.4 per 1,000 births among the St. Vincent ward service group—the advantages seemed to disappear insofar as morbidity of the infants was concerned. The rate of entry into the intensive care nursery in the 1967-1969 period was identical, 5.6 for each group. "This posed somewhat of a paradox in light of the exceptional mortality data," Dr. Lavery observed. "Why should these infants, the product of such intensive obstetrical care, be the victims of a morbidity rate similar to a population in much more apparent jeopardy?" The data became more confusing when the second period was reviewed, and the Foundling Hospital group morbidity was almost halved to 2.4, while morbidity rose to 7.3 in the ward service group.

The physician notes that there had been no major changes in the obstetrical management of the two populations, but there had been a striking change in one variable: The percentage of mothers in the Foundling Hospital group who decided to keep their children rose from 19 percent to 32 percent, while the percentage they gave up for adoption or placed in foster care fell nine and three percentage points respectively. Dr. Lavery observed: "The attitude these girls have toward their pregnancies, as reflected in the trend toward keeping the infants, may be one of the psycho-medical phenomena which has important ramifications in the well-being of the neonate. . . ."

Source

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Serving Teenagers

Teen Family Planning Clinics Meet Urgent Personal, Social Needs

"Family planning programs in the United States are failing to meet the needs of today's teenagers," according to a study made for the Office of Economic Opportunity (OEO) by the Health Services Division of Westinghouse Learning Corporation. In many programs which do provide birth control to teenagers the study found that frequently the ticket of admission is a prior out-of-wedlock birth or a wedding band. Additional problems were identified at a small two-day meeting on services to adolescents held in February by the National Center for Family Planning Services (NCFPS).

The urgent need for teenage contraceptive services is highlighted by the rapid increase in the number of out-of-wedlock births to girls between 15 and 19 years of age, the study observed. The number of out-of-wedlock births in this age group climbed from 69,000 in 1955 to 158,000 in 1968, and in 1968, 46 percent of all out-of-wedlock births in the country were registered in this group. The extent of premarital conception among married teenagers, the report observes, is indicated by the 1964-1966 National Natality Survey, which disclosed that 42 percent of first births to married females aged 15-19 occurred less than eight months after the marriage.

Many of the pregnancies could be avoided, the survey indicated, if meaningful family planning education and contraceptive information were provided in schools, if local laws and policies restricting access to contracep-

tive knowledge and services were rescinded, and if funds for such programs were made available.

The difficulties associated with parenthood generally are compounded for the unmarried pregnant teenager. Education is interrupted or ended for many. Health is threatened, since pregnancy for teenagers is riskier, and is often accompanied by pregnancy and delivery complications, toxemia, prematurity, anemia, excessive weight increase and elevated blood pressure. For girls under 17, the report notes, fetal mortality and neonatal mortality rates are quite high. Mental health is also endangered; one study shows that, over a four-year period, 14 of 131 teenage mothers made one or more suicide attempts after childbirth.

In the past few years, a start has been made in some communities in filling the unmet contraceptive needs of teenagers. Clinics designed exclusively or primarily for teenagers were operated by at least 21 Planned Parenthood affiliates and 131 OEO projects in 1970. In addition, there are free, youth-oriented clinics for 'street people' sponsored by health departments, and an increasing number of college health services are providing birth control services for coeds. Funds for these services are provided by federal and local governments, by foundations and by other private sources.

The Planned Parenthood Teen Clinic in San Francisco, which has been in operation since 1967, pioneered services to sexually active, unwed teenagers. Girls come to the clinic either through referrals by school nurses, social workers or parents, or after hearing about it from friends. The teen clinics, held in two locations, serve a total of 100 new patients per month. Rap sessions, an atmosphere of nonjudgmental acceptance of the teenagers' sexuality and confidentiality are the distinctive qualities of this service. Discussions of contraceptive methods, information on human reproduction, pregnancy testing, abortion counseling and referral as well as provision of contraception are provided. Most of the girls are between 16 and 17 years old. Women clinicians perform the medical examination, which includes a breast and pelvic examination as well as a Pap smear and a gonorrhea culture. Almost 95 percent of the girls prefer the pill as a contraceptive method, but an increasing number are also fitted with IUDs found to be especially suitable for girls who have never given birth. The clinic is financed by four private foundations; girls unable to pay are not required to do so. While girls are encouraged to obtain parental consent, it is not a prerequisite to service.

Another type of program is provided by the Berkeley City Health Department. The clinic is not designed expressly for teenagers because, the Westinghouse study explains, the clinic's personnel believe "teenagers are not different from other patients and do not require a different type of clinic service." Most patients are in their early twenties, with the next largest patient group in the late teens. Nurses and community workers, who have been trained to take blood pressures, check weight and arrange for pregnancy tests, assist physicians with patient examinations. There are two afternoon clinics per week, at which 30 patients with appointments are seen, as well as an average of six unscheduled patients. Pregnancy testing and counseling are part of this program as is treatment of vaginal infections. This program, although not exclusively for teens, "seems to work; teenagers do attend," according to the study.

In Los Angeles, where there has been a high incidence of venereal disease and hepatitis, widespread drug addiction and a large number of unwanted pregnancies among young people, the health department has established seven free youth clinics in which general ambulatory medical care is offered, as well as counseling for unwanted pregnancy, venereal disease and psychological problems. Most of the patients are between 15 and 25 years old. The seven clinics report serving about 125,000 patients a year, 60 percent of them females. Eighty-five percent of the health problems presented by girls are made up of requests for contraception, pregnancy diagnosis, abortion counseling and venereal infection; 20,000 patients are screened for pregnancy each year, about half of whom are actually pregnant. All are offered contraceptive counseling and services. The director, Dr. William Minkowski, pointed out at the recent NCFPS meeting that "in three years we have had only six calls from irate parents concerned that we gave contraception or abortion counseling to their youngsters." Even these few complaints were settled without much difficulty between staff and the parents. "Parents," Minkowski pointed out, "are really relieved that someone is assuming some responsibility for seeing that their kids are protecting themselves."

The clinic's director believes that the key to the program's success with teenagers is that "all our services are available to them without parental consent and without charge, that we care deeply about them and will not involve parents against their wishes."

While in San Francisco the pill is the preferred method, in Los Angeles the clinic staff believes the IUD is the preferred method of birth control for such a population. In an effort to maintain contact with patients, no more than a three months' supply of pills is given to a patient at one time, and use of the Dalkon shield IUD is being tested.

"The impressive attendance record that the youth clinics have achieved is an indication of the . . . need for these clinics," the Westinghouse study observes, concluding, "This type of setting is excellent for the delivery of family planning services to persons who could not easily obtain them elsewhere."

Following Up Teen Patients

The problem of follow-up of teenagers was described at the NCFPS meeting by Susan Olds, director of the Kent County Planned Parenthood Association of Grand Rapids, Michigan. The Teen Birth Control Clinic saw 1,600 young patients from the time it opened its door in July 1970 to the end of December 1971. During that period 448 teenagers (or 28 percent) failed to keep their clinic appointments. The youngsters were followed up by phone using a prearranged code name so as to maintain confidentiality. Of the total number of dropouts, 248 could not be located (51 because they gave false telephone numbers, the remainder because they had moved, gone away to school, given the number of a girl friend who didn't see them anymore, etc.). Of the 200 who were

contacted, 88 (44 percent) returned to the clinic; 47 (23.5 percent) said they were no longer sexually active; 17 (8.5 percent) said they were going to a private doctor; 11 (5.5 percent) became dissatisfied with the contraceptive method; 20 (10 percent) said they went to another clinic. Fifteen girls (7.5 percent) had become pregnant. Mrs. Olds pointed out that despite use of a prearranged code name (the "Julia code") in following up teenagers, parents sometimes became suspicious, if the teenage patient had gone away to school, for example, or was ill in the hospital.

A Baltimore program involves three services at the Adolescent Center in Sinai Hospital. Here, the Family Life Service serves never-pregnant sexually active girls, while the Birth Control Service focuses on teenage mothers. There is also a medical clinic, providing physical examinations, prescription of a contraceptive method by a gynecologist, and psychiatric, psychological and dental evaluations. About 400 girls attend the Family Life and Birth Control services regularly. The birth control method preferred by the nulliparous girls is the pill; IUDs or pills are the choice of the young mothers, the Westinghouse study observed. The study notes that the requirement for parental consent in the Family Life Service may be responsible for the low program participation and the high drop-out rate which was nearly 50 percent after the first year.

The Westinghouse study reported that obstacles to smooth functioning of current teenage family planning programs include the basic difficulty in preventing the first pregnancy; the problem of lining up a staff that can relate to the teenage client and not be judgmental; legal restrictions to providing contraception to the young people on their own request; ability to offer abortion as a backup method; and fear of community opposition to clinic visibility. Among other problems are lack of suitable educational materials for teenagers (much of the existing material has been presented from a middle-class, white, moralistic viewpoint), and lack of funds.

The study suggested that family planning programs be more flexible—that they be so designed as to meet the needs of the normal, healthy teenager; pregnant and prepregnant girls; males; college students; low-income teenagers; and very young teens. "Legal, social and cultural hurdles to extending aid to the teenagers should be eliminated," the study noted.

The participants in the NCFPS meeting pointed out that even where services existed it was difficult to find means to let sexually active teenagers know that there was a place where they could get contraception without involvement of their parents. The most obvious means of dissemination of information is through the schools and school newspapers, the public media—radio, TV and newspapers. However, schools are often reluctant to sanction even general birth control information programs—let alone information about where clinic services are available; and the media have shown reluctance to carry material advertising the availability of contraceptive services to the young and unmarried.

The question was also raised about the value of "rap sessions" where teenagers could frankly discuss sexual problems among themselves and with trained counselors. Many teen birth control clinics have instituted such rap sessions, with more or less structure. Sometimes they are voluntary; sometimes they are required. There were complaints that some of the voluntary sessions had been poorly attended, and the question was raised as to whether these were necessary adjuncts of a birth control service for young people.

While some participants expressed the belief that there was a special responsibility to provide sex education along with birth control information and services to teenagers, others expressed the opinion that the insistence on such programs could just set up another barrier to providing the needed contraception services. Said the director of the Los Angeles Health Department's youth clinics: "Our most pressing problem is preventing unwanted pregnancies and births among teenagers, not helping them to have well-adjusted sex lives."

All the participants agreed that advertising the availability of pregnancy tests was one good way of introducing sexually active teenagers to the program. Although participants reported that from 30 to 50 percent of the young people who came for pregnancy tests were not actually pregnant, all were presumably sexually active, and were offered contraceptive services. (Most of these teenagers were found to have been using no contraception, or ineffective contraception such as withdrawal and douche, previously.)

One other ancillary service that most of the participants felt was important for the teenage group was VD screening and treatment. Participants reported that from five to 20 percent of teenagers who came for birth control had undetected gonhorrea.

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Contraceptive Method

Second Generation IUDs Suitable for Nulliparae

Developing a safe, effective, acceptable contraceptive for the sexually active young woman who has never given birth (nullipara) is one of the major challenges confronting the family planning field. The usefulness of the pill for nulliparae is limited by its potential hazards, by its absolute contraindications in some circumstances and by the requirement that it be taken continuously over a long period of time by girls and women who may be having coitus infrequently. The IUD seemed an acceptable substitute but, until fairly recently, only the conventional devices of smaller size were available for use by nulliparae and investigators found that these had unacceptably high expulsion and pregnancy rates. In addition, there has been a high incidence of early removal of the devices for severe pain and immediate post-insertion reactions.

Two second generation IUDs—the small Dalkon shield and the Copper T—are now being tested, and in preliminary studies, presented at the 1972 annual meetings of the American Association of Planned Parenthood Physicians in Detroit and the American Fertility Society in New York, both devices appear to meet to some extent the special contraceptive needs of nulliparae.

- In Planned Parenthood Centers in San Francisco and Oakland, California, more than 900 nulliparae, some as young as 14, have been fitted with the small Dalkon shield; 42 pregnancies and 34 first expulsions occurred in 9,048 woman-months of use, according to Drs. Mary O. Gabrielson and Sadja Goldsmith, and Susan Strangeland.
- At the Women's Hospital of Los Angeles County—University of Southern California Medical School, 472 young women have received the Copper T. There have been 26 expulsions (5.5 percent) and four pregnancies (1.6 per 100 woman-years) after 2,941 patient-months of use, reported Drs. Robert Israel and Daniel R. Mishell, Jr.

Between April 1970 and June 1971, a total of 1,209 Dalkon shields were inserted in nulliparous women by several different physicians. Thirty-one percent of these patients were lost to follow-up, so analysis is based on 937 cases.

Insertion of the small Dalkon shield was generally, but not invariably, made during menses and no anesthetic was used. Analgesic (pain killing) agents were given before insertion to about half the patients. Discomfort during insertion was generally of brief duration and "patients generally tolerated the procedure well," according to Dr. Gabrielson.

The Dalkon Shield

The 5.1 percent pregnancy rate at 18 months found in this study is somewhat higher than that reported by other investigators, the physician noted. Fourteen of the 42 pregnancies occurred within the first two months after insertion, two-thirds during the first six months. The investigators attributed "at least 25 percent" of the pregnancies to incorrect insertion and suggested that clinicians may need more training and experience in working with the shield. The overall removal rate for medical reasons (pain and/or bleeding) was 26.4 percent after 18 months, with the rate in all categories consistently higher among teenagers than among those 20 years of age and older. More than 50 percent of all removals for medical reasons occurred within the first three months after insertion. The investigators observed that perhaps more general use of analgesics and occasional paracervical block would probably decrease the rate of removal for pain.

The overall infection rate was five percent, with half of the 44 infections occurring among teenagers, for a rate of 6.3 percent. Dr. Gabrielson found gonorrhea to be a problem of considerable dimension, with a five percent rate for the disease among the teenage patients. The physician suggested the following modifications in clinic routine for all requesting the IUD:

- Patients should be warned that gonorrheal infection while using an IUD can cause serious problems. Prompt return to the clinic after possible exposure or infection should be emphasized. A recurrence of pain, especially if accompanied by fever or discharge, should *not* be dismissed as a side-effect of the IUD; an immediate visit to the clinic for a checkup is necessary.
- Relative contraindications to the IUD should include a history of repeated gonorrhea or of many varied sexual contacts.
- When pain is encountered with the IUD, the clinician should carefully consider the possibility of infection. In the past, pain has been taken as a sign of uterine irritability in the presence of a foreign body, but it may be caused by endometritis, parametritis or salpingitis—all of which need immediate attention.
- If the patient asks that the shield be removed because of pain, and infection is a possibility, the clinician should attempt to identify the infection and treat the patient.
- Earlier and more frequent follow-up would permit better evaluation, and return at two, four and six weeks is "strongly recommended" if the patient continues to have any discomfort.

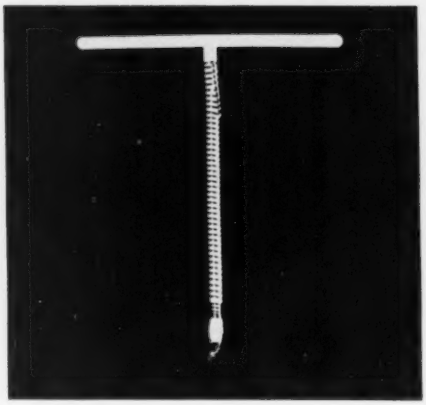
The continuation rate of just under 60 percent at 18 months was somewhat lower than previously reported for the shield, Dr. Gabrielson noted, but was comparable to rates reported by other investigators for a variety of devices, mainly in parous women, and for orals. Between 25 and 30 percent of the young women in the study, however, did not adjust to the shield, even though they had "decided to use the IUD in preference to orals and were highly motivated to continue its us." Nonetheless, the experience with the small Dalkon shield, the investigator said, "demonstrated that it is an appropriate alternative to the pill [for young nulliparae]. . . ."

The second type of IUD currently being investigated for nulliparous women is the Copper T. In the Los Angeles study, all nuliparous women requesting IUDs and "amenable to follow-up" were given the Copper T. This is a device made of polyethylene impregnated with barium sulfate, with 200 square mm of copper wire wrapped around the vertical arm of the T.

Four hundred and seventy-two women had received the Copper T between June 11, 1970 and October 1, 1971. Of the total group, 344 were nulligravidae, and 128 had had at least one prior pregnancy lasting less than 20 weeks, all terminated by abortion, most of them legal. A majority of the subjects were between 18 and 23 years old, 17 were 15-17, three were 14 and 109 were between 24 and 32.

No anesthetics or analgesics were given to patients prior to insertion, and post-insertion analgesics were given in less than 10 percent of cases. The device could not be inserted in one patient and only five women had mild vagal reactions. There were no fainting episodes.

Preliminary results of 2,941 patient-months of experience show (as of February 11, 1972) low expulsion rates compared with conventional IUDs; there were 26 first expulsions of the Copper Ts (5.5 percent). The majority of these (22 or 85 percent) occurred in the first six months postinsertion. Thirteen of the 26 requested reinsertion, and of this group, five expelled the device a second time. A total of 67 patients had the device removed, only 35 of them because of cramping or bleeding; the majority (75 percent) of these were removed in the first six months after insertion. Four patients became pregnant with the device in situ, one, four, seven and 10 months after insertion; one patient, 16 years old, wished to continue her pregnancy and the device was removed and the pregnancy continued. The other three elected abortions, which were performed by suction. Preliminary results indicate, the researchers reported, that the pregnancy rate was only 1.6 per 100 woman-years. Only 25 patients have been lost to follow-up.



The Copper T

The physicians concluded, on the basis of their experience with this group of women, representing 2,941 woman-months of use, that the Copper T provides "nulliparous and nulligravid women with a good, alternative method of contraception." The pregnancy rate of 1.6 per 100 woman-years "is comparable to pregnancy rates reported with intrauterine contraception in multiparous patients" and the 7.4 percent incidence of removals for pain and bleeding is "low in comparison with previous IUD statistics concerning nulliparа, as well as removal rates . . . in a multiparous population." Similarly, they note, "a 5.5 percent incidence of expulsions also represents a low incidence . . . in the nullipara as well as the multipara."

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Welfare

Pa. MDs Shun Serving Patients on Medicaid

Few welfare clients in Pennsylvania are getting family planning services from private doctors reimbursed through Medicaid and few private doctors are willing to take on Medicaid patients because of the "inadequacy of the fees [$4 per patient visit], the amount

of paper work, and the long delays in receiving reimbursement," according to Dr. Jack Sabloff, Director of the Bureau of Field Services, Pennsylvania State Department of Health.

Dr. Sabloff draws these conclusions from results of a mail survey of 10,957 doctors of medicine and 1,400 doctors of osteopathy in practice in Pennsylvania. The survey, endorsed by both the State Medical Society and the Osteopathic Association, was designed to show how many physicians in the state provided family planning services to private patients, where they practiced, what types of service they gave, which contraceptive methods they offered and whether they would take on additional Medicaid patients.

Almost 65 percent of the 12,357 physicians responded to the questionnaire, but 18 percent of them had no private practice, leaving 6,512 respondents who actually saw private patients. Dr. Sabloff found that almost four out of five of these provided some level of family planning service. Seven out of 10 or 3,542 of this last group, gave direct service, while the remaining three out of 10 referred their patients to clinics or other physicians.

The survey revealed that a substantial proportion of the physicians providing direct services offered their patients the nonprescription family planning methods as well as the more effective prescription methods. As shown in Table 1, 95 percent prescribed the oral contraceptive and 70 percent the diaphragm, but only 30 percent prescribed the IUD. More than 60 percent said that they prescribed the condom, foams and jellies, and 45 percent offered the rhythm method, strikingly higher percentages than offered the IUD, one of the two most effective methods. The obstetrician-gynecologists, as might be expected, were far more likely to insert the IUD than were the general practitioners.

About one-third (34 percent) of the physicians providing direct services indicated a willingness to take on "additional Medicaid patients referred by local health and welfare agencies for family planning." It is unlikely that any of the state's physicians had a significant number of such patients at the time of the survey, since Pennsylvania State Department of Public Welfare figures show Medicaid reimbursements to private physicians for family planning care were made for only 1,467 welfare clients in the state during fiscal year 1970. This figure represents a small fraction of total need among poor women in the state, whether measured against the approximately 96,000 women in Pennsylvania families receiving Aid to Families with Dependent Children (AFDC) funds in 1969, or the 263,000 medically indigent women needing family planning services, as estimated in the Office of Economic Opportunity's study. *Need for Subsidized Family Planning Services: United States, Each State and County, 1968.*

Respondents were asked to add comments and 284 doctors did so. While the vast majority favored family planning, about 15 percent opposed it; 23 percent who favored family planning were critical of the state's Medicaid program, both for its "inadequate" reimbursement and its bureaucratic demands.

The Pennsylvania State Health Department has made available to each State Health Center a list of the names, addresses and family planning services rendered by all responding physicians in the areas they cover. Dr. Sabloff expects that this information should not only prove useful for case referrals, but should "enable each county and region to more accurately assess the availability of its resources and its unmet needs."

Table 1. Percent of Pennsylvania Physicians Providing Direct Family Planning Services to Private Patients, by Method, Spring 1970

Method Provided	*GPs*	*Ob-Gyns*	*All**
Pill	95	96	95
Diaphragm	70	89	70
Other (Condom, Foam, Jelly, etc.)	60	82	63
Rhythm	40	73	45
IUD	21	73	30

*Also includes some internists, pediatricians, surgeons and physicians in general preventive medicine.

Sources

Office of Economic Opportunity, *Need for Subsidized Family Planning Services: United States, Each State and County, 1968,* U.S. Government Printing Office, Washington, D.C., 1969.

Office of Planning and Research, Pennsylvania State Department of Public Welfare, (personal communication).

J. Sabloff, "Physician Survey—Family Planning," (unpublished).

Reproductive Changes

Number of Births Responsive to Social, Economic Change

Is it true, as some scientists claim, that "human reproductive behavior does not voluntarily respond to environmental conditions? [and that] man, following his natural instincts, will breed without restraint and population will grow until environmental limits force a halt. . ."?

An examination of American reproductive behavior since 1810 leads Dr. Richard A. Easterlin of the University of Pennsylvania to observe, "Nowhere . . . is this view called more into doubt than by American experience. . . ."

He points out that at the beginning of the nineteenth century, "American fertility was extremely high . . . markedly higher than that ever recorded for any European country. . . ." Then, from about 1810 on, fertility started to decline, despite continued geographic expansion and vast natural resources to supply a growing people and country.

Dr. Easterlin hypothesizes that the "staggering change in American reproductive behavior" (by 1910 the ratio of children under five to women 20-44 years old had fallen by over one-half) is a voluntary response of the nation's families to environmental change.

Dr. Easterlin analyzes the reasons for this decline in terms of the economic theory of fertility, in which tastes, prices and income determine the optimal number of children. (This number, with infant and child mortality taken into account, determines the optimal number of births. Attitudes toward fertility control and the availability of such measures will determine how actual births exceed the desired optimum.)

Fertility tends to be higher in frontier areas, somewhat lower in settled agricultural areas, still lower in new urban areas and lowest of all in the old cities. American economic growth has followed that pattern, with "the result a continuing secular pressure toward fertility reduction."

He adds the possibility that "as population increasingly presses against land resources, fertility will decline in the rural population as well, without the prerequisites of urbanization and industrialization."

Tastes are determined by education and the availability of new goods, Dr. Easterlin points out. Both of these permit couples to exercise new options which may compete with children as a source of enjoyment.

Education was typically most advanced, and goods most diverse and available, in the older urban areas. Consumption alternatives were more and more scarce, and children more and more valuable, as Americans moved through the economic chain to newer urban areas, settled agricultural lands and, finally, to frontier communities. Similarly, knowledge and availability of methods to control fertility declined as they moved toward the frontier.

In addition to all these factors, Dr. Easterlin poses still others. The frontier does not remain a frontier, but gradually becomes an area of settled agriculture. The new city becomes an old city. In other words, within each of the four areas a process of "aging" is at work, and with it comes a decline in fertility. Newcomers to the cities, whether from rural areas or foreign countries, bring with them the tradition of higher fertility—a tradition that gives way to "tastes" for lower fertility by the second and following generations.

From the 1800s onward, infant and child mortality slowly decreased, another factor

in the fertility decline, as fewer babies would have to be born to assure a given number of survivors.

Does the growth of per capita income associated with economic development tend to raise fertility? Dr. Easterlin's answer is, not necessarily. On the one hand it may indeed make resources available to a household enabling them to have more children. There is another possibility, though, the "intergeneration taste effect" in which each succeeding generation, growing more affluent, "has greater goods aspirations" which may militate against increased family size. The two influences may tend to cancel each other out, he says.

Fertility Drops as Spaces Fill Up

He further emphasizes that the American fertility decline "reflects not only the process of urbanization and industrialization, but that of settlement as well. . . . The American experience raises the possibility that as population increasingly presses against land resources, fertility declines set in within the rural sector itself." Dr. Easterlin maintains that this pattern, already the historical experience of Europe and Japan, may eventually occur in less developed nations as well.

Whatever the weight of the various elements which determined it, the fertility decline in the United States (and elsewhere) was the result of purely voluntary action. Dr. Easterlin notes that although marriages were sometimes deferred and the period of childbearing thus shortened, the decline occurred within marriage as well.

"But this is not to suggest that there was no need for family planning policies then or, for that matter, that there is no need today," he states.

However, it does suggest to Dr. Easterlin that "the nature of what is called 'the population problem' takes on a radically different guise. The question is not one of human beings breeding themselves into growing misery. Rather, the problem is whether the voluntary response of fertility to environmental pressures results in a socially optimal adjustment." This remains to be determined, but the potential for adjustment, on a voluntary basis, has been amply demonstrated, he states.

The research that is needed to deepen our understanding of families' wants and aspirations, and of the role that the desire to have and raise children plays in them, should be undertaken promptly, the economist urges, "in an atmosphere not of hysterical urgency, but of sensitive concern."

Source

R. A. Easterlin, "Does Human Fertility Adjust to the Environment?" *American Economic Review*, 61:399, 1971.

Evaluation

Side Effects and Problems in Clinics Found Major Reasons for Dropouts

The most common reasons given by women for dropping out of family planning clinics relate to dissatisfaction with clinic performance, side effects of a method, or accidental pregnancy, according to a study of clinic discontinuation made in Mexico City by Dr. Alan Keller under a grant from the Population Council. But clinic dropout was not found to be synonymous with discontinuation of contraception. More than two out of five women continued regular use of an effective method (pill, IUD, injectable), and more than one out of six continued irregular use of an ineffective method. Another two-fifths of the women who discontinued going to a clinic stopped using contraception altogether.

The women in the sample were, for the most part, poor, married, and had some primary school education. Fifty-six percent were between the ages of 15 and 29, 39 percent were in their thirties, and only five percent were 40 years of age or older. Although these women were relatively young, the number of living children per patient was rather high: 65 percent had four or more children while only 34 percent had between one and three children. Only 0.4 percent had no children. Despite the fact that virtually all the women were Catholics, at least 10 percent admitted having had one or more induced abortions. When comparisons were made between the 2,214 clinic dropouts and the 3,167 active patients, no significant differences by demographic variables were found. The majority of both groups, according to Dr. Keller, had four or more children and were at least 25 years old.

The study found that for every 100 patients who entered the clinic program, 72 could be expected to be active at the end of six months, 60 at the end of one year, 39 at the end of two years and 21 at the end of three years. The investigator commented, "Discontinuance occurs most frequently during the first six months then diminishes during each major subsequent unit of time." He believes that this pattern, also reported in many other studies, "doubtless is a function of the typically early onset of side effects and of the consequent early reduction of the active patients to the group of the most highly motivated."

Differences in clinic continuation rates were quite marked by method, the study found, with higher percentages of IUD than injectable or oral contraceptive patients remaining in the program for a longer time. In the long run, though, there appeared to be diminishing differences between oral contraceptive and IUD patients. Thus, while 76 percent of IUD acceptors were still in the program after six months, as compared to 61 percent of oral contraceptive users, and the percentages were 64 and 50 percent, respectively, at 12 months, at 24 months the gap had narrowed, with 40 percent of IUD patients still active compared with 34 percent of pill patients.

In an attempt to discover whether clinic dropout was synonymous with method dropout, some 703 clinic dropouts as well as 110 active patients were interviewed in person. The investigator found that 64 percent of 321 IUD acceptors continued regular use of an effective method (IUD, pill, injectable), nine percent used the more ineffective methods irregularly, while 27 percent discontinued contraception. Discontinuation of contraception was much higher among pill users, with only 22 percent of 342 clinic

dropouts continuing regular use of an effective method, 23 percent using the ineffective method irregularly and 55 percent discontinuing contraception. The interviews showed that if a patient continued to use a method soon after leaving the program, she would continue to use it for some time; if, however, she discontinued contraception shortly after leaving the clinic she was unlikely to resume using it for several years.

The reasons women gave for dropping out of clinics related most often to "disagreeable aspects of clinic attendance, side effects, or personal difficulties which made attendance difficult . . . ," the investigator found. Thus, of 680 women giving at least one reason for dropping out, more than one-third (34 percent) mentioned "waiting time in clinic" and "unable to receive treatment, maltreatment by staff." Side effects were mentioned by almost one-quarter (24 percent) and accidental pregnancy by just over one-fifth (22 percent). Only 15 percent of users of each method mentioned "lack of exposure to intercourse, recuperation from an illness, or desire for pregnancy" as a reason for dropping out.

Women on the pill were more prone than those on the IUD or injectable regimen to hear about side effects and experience them personally, causing them to drop out of clinic attendance early; the others were more apt to be satisfied with their method but be more prone "to notice, and perhaps [be] less prepared to tolerate the frustrations of clinic attendance," according to Dr. Keller.

Source

A. Keller, "Mexico City: A Clinic Dropout Study," *Studies in Family Planning*, Vol. 2, No. 9, The Population Council, 1971, p. 192.

Condoms

Washington State OKs Slot Machine Sales

Faced by rising rates of venereal disease, the state of Washington has authorized the sale of condoms in vending machines. An estimated 500 machines have already been installed in men's and women's restrooms in taverns, restaurants, gas stations, airports and hotels, according to the Washington State Board of Pharmacy. No opposition has been expressed by the public.

The number of reported gonorrhea cases in the metropolitan area of Seattle climbed from 4,500 in 1969 to 5,200 in 1971, Dr. A. H. B. Pedersen, Chief of the Venereal Disease Clinic of the Seattle-King County Department of Health, reported. He added that there had also been a consistent increase in infectious syphilis cases reported in Seattle since 1965, rising from 50 cases a year

to 90 cases in 1971. Dr. Pedersen said the venereal disease problem had been accentuated by the influx of young male homosexuals into the Seattle area one year ago.

Washington had had a law for many years specifying that prophylactics could not be sold except by licensed pharmacists, according to David C. Campbell, Executive Secretary of the Washington State Board of Pharmacy. Last year, the state legislature changed a section of the law to give the pharmacy board discretion to draft regulations to increase the use of prophylactics throughout the state, Campbell said.

The board then drafted new regulations providing for the sale of prophylactics through vending machines, and held two hearings. At the hearings in October, objections were raised by the Washington State Pharmaceutical Association and representatives of the manufacturer of one major brand of condoms. They argued that product quality could not be maintained in vending machines. However, the board's regulations provide that before condoms can be sold, three dozen samples must be submitted annually by any vendor, and must show a failure rate of less than one percent, according to Campbell. The vendor of the condoms must pay a license fee of $10 per machine, per location.

"We feel everything is moving smoothly," Campbell said. "The main thing is quality control. Each prophylactic has to be dated, individually wrapped, and cannot be sold in the state if it is more than three years old from the date of manufacture."

A distinction between contraceptives and prophylactics is made by some states. The state of Washington defines a condom as being used for prevention both of disease and of conception. Other states define prophylactics as preventing disease, while contraceptives are defined as preventing pregnancy. Sales of prophylactics through vending machines are prohibited in California, Colorado, Hawaii, Kentucky, Michigan, Nebraska, Pennsylvania, Utah, Virginia and Wisconsin. States prohibiting the sale of contraceptives in vending machines include Arkansas, Idaho, Maryland, Massachusetts, Minnesota, Montana, North Dakota, Oregon and South Dakota. There are several states with exceptions. For example, in Maryland, contraceptives may be sold in vending machines where alcoholic beverages are sold for consumption on the premises. In Minnesota, although the law forbids sale of contraceptives in vending machines, health and welfare organizations are permitted to sell contraceptives in vending machines. Other states have no restrictions on such sales.

The Washington action was taken in the context of a national rise in the incidence of gonorrhea. Dr. William J. Brown, Chief of the Venereal Disease Branch of the Center for Disease Control, Health Services and Mental Health Administration, in Atlanta, has estimated the current incidence of gonorrhea at some 2,000,000 cases annually in the United States. The greatest increase in gonorrhea rates per 100,000 during the past three years has taken place among the 15-19-year age group. The gonorrhea rate for this group rose 17 percent between 1969 and 1970, while the rate for the 20-24-year group increased 13 percent in the same period.

Syphilis rates are also increasing after a decline between 1965 and 1969. During the first eight months of fiscal 1971, 17,700 cases of infectious syphilis were reported, compared with 14,908 cases for the same period in fiscal 1970, according to the American Social Health Association.

Sources

David C. Campbell, Executive Secretary, Washington State Board of Pharmacy, personal communication, Feb. 23, 1972.

"Fiscal 1971 May Well be a Record Year for VD," *Journal of the American Medical Association*, 216:949, 1971.

A. H. B. Pedersen, M.D., Seattle, Washington, personal communication, Feb. 18, 1972.

"U.S. Alarmed by Gonorrhea, Out of Control," *Medical Tribune*, Vol. 12, No. 20, 1971, p. 1.

Health Effects

WHO Reports on Health Aspects of Family Planning

The impact of family planning on the physical and mental health of all the members of a family and the possible inclusion of family planning as a component of existing health services are subjects which receive major emphasis in a significant WHO report.

Prepared by investigators from eight member counties, the report, *Health Aspects of Family Planning*, discusses four areas in which the impact of family planning on hu-

man reproduction is assumed to be maximal. These include:

- avoidance of unwanted pregnancies and births, and—through assistance to the infertile—helping couples achieve wanted births that might not have taken place;
- a change in the total number of children born to a mother;
- changes in the intervals between pregnancies;
- changes in the time when births occur, particularly the first and last, in relation to the parents' age, especially the mother's.

The report stresses that these reproductive changes do not exist in isolation from social, economic and cultural factors:

> For example, high parity is commonly associated with low socioeconomic status, poor nutrition, poor hygiene, overcrowding, poor education, and resistance to change. These factors are all associated with each other and in turn tend to be linked with premature or difficult labor, low birthweight, trauma, and infection, which makes it difficult to establish clear causal relations.

A number of studies cited in the report link maternal mortality and morbidity with increasing parity. Some of these are directly related to pregnancy and delivery—placenta previa, hemorrhage, prolapsed cord, abnormal presentations, uterine rupture. Other studies suggest that high parity is associated with nutritional deficiencies in the mother which may cause anemia and calcium deficiency, making it difficult for her to breastfeed her infant.

Both increased numbers of pregnancies and increasing age of the mother have been linked with rising fetal death rates, and some investigations have shown a relationship between high parity and problem families, with deprivation of the mother's care of particular concern.

The report notes, however, that, "The tendency at present is to look at the drawbacks of large family size. Some observations and statements suggest, however, that there may also be advantages for the individual, such as greater emotional security. Careful study of these aspects is indicated."

In developing and developed countries alike, it appears that an interval of at least two years between pregnancies results in the lowest rates of late fetal loss and neonatal mortality. In the less developed countries, diarrhea is a principal cause of death in the first two years of life. It is often clearly related to poor weaning practices; early weaning often follows a short pregnancy interval. Malnutrition may follow, reaching its peak in the child under two. This, in turn, contributes to the high incidence of infectious diseases which can prove fatal to the already compromised child.

It is generally agreed that the risks of maternal mortality increase with age. A U.S. study showed maternal risk to be 4.5 times greater in women aged 40-44 than in women aged 20-24. Complications of pregnancy and delivery follow a similar pattern, with the risks greatest below 20 and over 35 years of age. Similarly, fetal loss, neonatal mortality and prematurity are lowest in mothers between 20 and 34 years old.

Down's syndrome (mongolism) was cited as but one example of a congenital anomaly associated with the mother's advancing age. The report noted that "a mathematical prediction that the use of birth control methods to eliminate these periods of highest risk . . . would reduce the number of mongoloid children by one-third appears to be substantiated by recent studies in Japan, Australia, and the United Kingdom."

Who is to provide family planning services? Can the "contact phase" (case-finding), "starting phase," and "continuing care phase" (follow-up), be given within the framework of existing health services? What is the ideal combination of activities, personnel and setting?

Granting that the answers to these questions will vary widely from community to community and from country to country, the WHO report suggests a number of "significant and feasible" combinations of family planning with other health activities.

Many countries have seen the value of combining family planning with postpartum care, whether this is given in a hospital or in a home. A U.S. study was cited which showed that cervical cancer screening can be done most economically when combined with a family planning service. Other combinations which may be appropriate are the joining of family planning with pregnancy testing, child health services and nutrition activities. These various programs may be located in hospitals, community centers, factories and welfare centers, among others.

Still other areas which may encompass family planning are those of general medical care, registration of vital statistics, education for family life and community development activities.

The personnel ordinarily involved in these various programs can perform from a small part to all the services a comprehensive family planning service demands. A local 'curandero', although primarily a curer of snake bites, can be trained to distribute contraceptive supplies, as can the untrained birth attendant. Social workers, health educators, health visitors and public health nurses, nurses, midwives and auxiliary nurse-midwives can assume increasing responsibility in the contact, starting and continuing care phases. But, of course, it is the physician who must bear the responsibility for medical management of patients and for supervising other individuals who carry out parts of a family planning program. "Through their influence and prestige," the report states, "physicians have been of great assistance where their support has been enlisted in organizing educational efforts to introduce family planning to the public."

Success of any given program can be measured in many ways. Not enough attention has been given to evaluating the location of services, the staff, the time a physician spends with each patient, the choice of methods offered. All of these may affect whether or not the patient who needs the service will appear where it is being offered, whether she is dealt with properly, whether she is adequately informed of the disadvantages and advantages of available methods and, in the final analysis, whether she will continue in the program.

There are many gaps in knowledge of how family planning affects health. Some correlations that are seen in one country are not in another. The WHO report suggests that many more cooperative, international studies are needed to fill these gaps—particularly in the following areas:

- the effects of nutrition on family planning,
- the relationships between weaning and the intellectual development of children,
- causes of infertility,
- reasons for abortion,
- effects of parity and spacing on complications of pregnancy and delivery, and on child survival,
- influence of breastfeeding and postpartum abstinence on pregnancy spacing,
- direct effects of various methods of birth control.

Dr. C. E. Taylor, Professor and Director

of the Department of International Health of the Johns Hopkins School of Hygiene, was chairman of the group, and Dr. S. Polgar, Associate Director of the Carolina Population Center of the University of North Carolina, was temporary advisor. Nations represented were Barbados, England, Hungary, India, Republic of Korea, Uganda and the United Arab Republic.

Source

World Health Organization, *Health Aspects of Family Planning*, Report of a WHO Scientific Group, Technical Report Series, No. 442, Geneva, 1970.

Rural Programs

Program Success Built on Community Support

A Family Planning Office served as catalyst for the delivery of family planning education and services to a small rural North Carolina county which has no hospital and only one full-time physician for a population of more than 20,000 people. The program was initiated by a group of Caswell County citizens and funded in late 1967 by the Carolina Population Center. The Caswell County Family Planning Office, through a carefully planned educational campaign involving the organized resources of the county (the health department, schools, welfare and social service agencies, agricultural extension service, civic groups and libraries, as well as individual ministers, merchants, the one physician and the pharmacist), succeeded in securing support from the people of the county in a virtually untouched area of need. Clubs and community organizations were introduced to the program, audio-visual materials, speakers and printed materials were supplied to the schools and libraries, and inservice training was given to agency personnel, such as nurses and social workers. Working on the principle that minimizing opposition was essential to the success of a new and perhaps sensitive program, the project aimed at securing involvement and acceptance by three groups in the county—the community leadership, agency personnel and potential users of contraceptives.

To spread information and to stimulate interest in the family planning activities underway in the county, a bimonthly newsletter was mailed to 500 county opinion leaders. In addition, a family planning column, dealing with population problems as they affected Caswell County specifically, and family planning and family life and sex education topics in general, was printed in the weekly newspaper. The effectiveness of the information services was evident in the frequent references to the program as a positive force in the community by civic leaders and ministers, the numerous discussions on population and community problems at civic clubs and the requests for information and services by local teachers, PTAs and other organizations. For example, after a rather cool reception to the idea of population education in 1969, over 75 percent of Caswell's teachers had begun dealing with population matters in the classroom by early 1971. Pharmacists, at the outset afraid of a loss in sales from the competition posed by free clinic services provided by the health department, were pleased to note after two years that sales had either remained constant or increased. The owner of a laundromat, who received the newsletter, became so interested in the program that he installed a condom vending machine in the laundromat restroom and convinced a competitor to do the same, so that women who were embarrassed to ask for condoms at the pharmacy could buy them in the privacy of the restroom.

People of all economic groups—middle-income couples as well as the poor and the near-poor—needed family planning services in Caswell County. An analysis of the activities of community agencies revealed a gap in family planning services to newlywed couples, high-parity women (women with three or more children), women who had recently given birth in a hospital and sexually active youth, among others. For the newlyweds, the Family Planning Office mailed kits of family planning information to couples who had applied for a marriage license or announced their impending marriage in the local newspaper, and within a week or 10 days followed up with home visits from community aides. Of all newlyweds served during the first year of visits, mailings of educational kits resulted in 31 (56 percent) new users out of 55 potential contraceptors; that is, couples who were *not* pregnant and had *not* decided to practice contraception before the kits were mailed. Aide visits resulted in an additional 19 new contraceptors.

As to the problem of high parity, local vital statistics information enabled the Family Planning Office to identify high-parity mothers who were then visited, counseled and provided with educational materials designed for their needs. Community aides found only 37 women (of a total of 281 visited) who were not using some method of contraception (six white, 31 nonwhite). After talking with aides, 23 of the nonwhite women started practicing contraception. Referrals from high-parity women led to visits with 60 women who consequently started practicing contraception. Assured that most of the county's high-parity women had received birth control services, the Office then focused on other women who were having babies. In 1965, births to women who had already had three or more pregnancies made up 52.8

percent of all births. In 1970 that figure had dropped to 31 percent with the greatest decline coming between 1969 and 1970.

The absence of a local hospital put the Caswell staff at a disadvantage in reaching postpartum mothers. In addition, only one nearby hospital offered postpartum family planning services, and this was not the hospital most frequently visited by Caswell residents. At the end of the first year of a "new mother" home visiting project, 59 percent of these women were found to be practicing contraception (100 out of 170 visited); 52 of the 70 women who were not using contraception at the time of the first aide visit received follow-up visits by the end of the year and by that time 42 of them had begun using contraception.

Clinic services in North Carolina are not available to unmarried, nulliparous teenagers without consent of parent or guardian. To overcome this problem, the family planning outreach workers began in 1971 to distribute condoms to sexually active teenagers who were not willing to go to the clinic and could not afford contraceptives. During 1970, a black outreach worker contacted 114 teenagers, not all of whom were sexually active. Thirty-two of those who were active began clinic services and condom distribution was begun to focus on the needs of the remaining active teenagers.

The Caswell County experience strongly suggests the effectiveness of a comprehensive community-level approach to family planning with utilization of all possible resources of the local community.

Source

O. J. Sikes, III and L. H. Dawson, "Community Involvement in Rural North Carolina," Carolina Population Center, University of North Carolina, Chapel Hill, N. C., 1971 (mimeo).

Credits:

p.2: R. J. Blandau, U. Washington Medical School; pp.3, 4, 15: Ken Heyman; p.6: NY Post; p.8: PP WP Alameda-San Francisco; p.10: David Amundsen; p.12: Bernard Cole; p.13: Schoenbach Co.; p. 14: United Nations

Family Planning Digest
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All openings listed below are with Equal Opportunity employers.

●

Position: Medical Social Worker
Agency: Richmond City Health Department
Location: Richmond, Virginia
Salary Range: $8,784-$11,472
Qualifications: Master's Degree from an accredited school of social work requiring two years of graduate study; two years of social work experience, including one year in a clinical setting.
Contact: Cynthia E. Bentley, Richmond City Health Department, 500 North 10th Street, Richmond, Va. 23219.

●

Position: Public Health Nurse
Agency: Richmond City Health Department
Location: Richmond, Va.
Salary Range: $7,680-$9,600
Qualifications: Graduation from an approved school of nursing; eligibility for registration in Virginia as a graduate professional nurse; and, in addition, the completion of a program in public health nursing for graduate nurses approved by the National League for Nursing; or graduation from an accredited college or university approved by the National League for Nursing or completion of at least six years of progressively responsible public health nursing experience evaluated as outstanding performance and the satisfactory completion of an objective test of public health nursing information and judgment.
Contact: Ada M. Bookman, Richmond City Health Department, 500 10th Street, Richmond, Va. 23219.

●

Position: Three M.D.s, Ob-Gyn Board-certified or eligible
Agency: Maryland State Department of Health and Mental Hygiene
Location: Baltimore, Md.
Salary Range: $24,000 for Board eligible M.D.; $25,000 for Board certified M.D.
Job Description: One physician will direct the Maternity and Family Planning Program for two adjoining counties on the Eastern shore of Maryland.

Two physicians will be assigned to the Federal Family Planning Program for the state of Maryland, and will cover a number of family planning clinics throughout the state; they will assist in program administration, policy making and statistical evaluation.
Qualifications: Board certified or eligibility

●

Position: Public Health Nurse
Agency: Maryland State Department of Health and Mental Hygiene
Location: Baltimore, Md.
Salary: $14,400 (pending pay board approval)
Job Description: Supervision of the various county clinics and programs of the Federal Family Planning Program in Maryland
Qualifications: Certified nurse-midwife
Contact: For the four positions described above, J. King B. E. Seegar, Jr., M.D., Chief, Maternity and Family Planning Section, Department of Health and Mental Hygiene, 301 West Preston Street, Baltimore, Md. 21201

●

Position: Executive Director
Agency: Planned Parenthood Association of Butler County, Inc.
Location: Hamilton, Ohio
Salary: Negotiable, depending upon qualifications and experience
Job Description: Implement policy and stimulate new activities; direct existing programs and clinics; supervise staff.
Qualifications: Either a B.A. from an accredited liberal arts college, or professional experience in place of college degree. Previous experience in administration, community organization, public health or social welfare is required.
Contact: Resume to the Personnel Committee, Planned Parenthood Association of Butler County, Inc., 305 South Front Street, Hamilton, Ohio 45011

●

Position: Seven Assistant Directors of Resources
Agency: Planned Parenthood-World Population
Location: One opening in each of seven regions, as funds become available: West (San Francisco, Calif.), Southwest (Austin, Tex.), Midwest (Kansas City, Mo.), Great Lakes (Detroit, Mich.), Southeast (Atlanta, Ga.), Mid-Atlantic (Philadelphia, Pa.), and Northeast (New York, N.Y.).
Salary Range: $14,000-$20,000
Job Description: Fund raising consultant to Affiliates.
Qualifications: Experience in fund raising and fund raising techniques, tact and ability to work with volunteers, boards and committees.
Contact: Jess Speidel, Director of Resources, Planned Parenthood-World Population, 810 Seventh Avenue, New York, N.Y. 10019.

●

Position: Medical Director
Agency: Planned Parenthood-World Population
Location: New York, N.Y.
Salary Range: Commensurate with experience
Job Description: Provide expert and informed information and guidance on all medical matters related to program initiation, implementation, research and evaluation in the field of family planning. This counsel is provided to the President, Chief Executive Officer, Department Heads, other professional staff and also directly to Affiliates and other agencies.

Work with National Medical Committee of the Federation, American Association of Planned Parenthood Physicians and help develop regional medical committees to review the medical programs of the 188 affiliates.
Qualifications: M.D., preferably obstetrician-gynecologist in private or clinic practice and with management experience.
Contact: Pamela Veerhusen, Director of Affiliate Services, Planned Parenthood-World Population, 810 Seventh Avenue, New York, N.Y. 10019

●

Position: Executive Director
Agency: New Mexico Family Planning Council
Location: Albuquerque, New Mexico
Salary Range: $12,000-$16,000
Job Description: Assume overall administration and implementation of the statewide family planning program; develop good working relationships with the administrative staffs of related agencies; handle public relations to increase program acceptance; serve as a consultant to voluntary and government agencies in promoting the goals of the organization.
Qualifications: Minimum of five years experience as an administrator, preferably in the fields of health or social work; background in the development and administration of grants; ability to speak Spanish preferred.
Contact: Gail Montgomery, Personnel Chairwoman, 113 Montclaire Avenue, S.E., Albuquerque N. Mex. 87108.

U.S. GOVERNMENT PRINTING OFFICE: 1972 O—735-097(1)

DHEW PUBLICATION NO. (HSM) 72-250